Simplified SAN storage for IBM @server xSeries and BladeCenter systems

IBM TotalStorage DS300

Highlights

- ***Designed to provide a cost-effective Internet SCSI (iSCSI) subsystem for workgroup storage applications, such as file, print and Web serving, as well as remote boot for diskless servers***
- ***Leverages standard Ethernet infrastructure to help offer a simple, affordable storage area network (SAN) solution—with single- and dual-controller configurations***
- ***Includes easy-to-use IBM ServeRAID™ Manager, which provides common management software***
- ***Scales to 4.2TB of physical storage capacity using 300GB Ultra320 SCSI drives***

Flexible, low-cost SAN storage

The IBM TotalStorage® DS300 is an entry-level, low-cost workgroup storage subsystem for IBM @server® xSeries® and BladeCenter® servers. Designed to deliver advanced functionality at a breakthrough price, the DS300 offers an exceptional solution for workgroup storage applications, such as file, print and Web serving, as well as remote boot storage for diskless servers.

Leveraging standard Ethernet infrastructure and highly reliable SCSI drives, the DS300 is designed to offer a simple, affordable storage area network (SAN) solution that can be used in network-attached environments for shared storage. For even greater flexibility, the DS300 is designed to allow simultaneous support of heterogeneous operating system (OS) environments for xSeries and BladeCenter servers—in either single- or dual-controller configurations.

SCSI reliability, with scalability for tomorrow

By utilizing standard xSeries hot-swap Ultra320 SCSI drives which are designed to offer high mean-time-between-failure, the DS300 is ideal for high I/O processor (IOP) performance today—and allows for future growth tomorrow. The modular design of the DS300 is designed to allow you to easily perform upgrades and additions to help meet the needs of your growing, changing application environment—scaling to support increasing volumes of data flexibly and affordably.

In addition, advanced software features on the DS300—including access control lists (ACLs), online array expansion, online LUN expansion and Global HotSpare—are designed to give administrators the power to configure storage according to changing usage needs. These features also help enable IT managers to share storage across multiple application servers.

Designed to ensure business continuity

At entry-level prices, the DS300 is designed with impressive redundancy features. The subsystem is a rack-mountable, 3U enclosure with 14 SCSI drives and redundant design, hot-swap power and cooling modules, the DS300 features RAID reliability and high-availability software to help maintain operations.

The storage subsystem supports either one or two controllers for high-availability configurations. Each controller is designed to support two Gigabit Ethernet ports for data paths and one port for management so that—even if a line or a controller fails—multiple paths between servers and storage can help maintain a connection.

The DS300 also offers optional advanced features such as IBM FlashCopy® solutions, which are designed to help reduce storage backup windows and improve storage utilization for Microsoft® Exchange, Microsoft SQL Server™ 2000 and Lotus Notes® applications.

Powerful management tools

The DS300 is designed to offer excellent storage management and configuration capabilities through IBM ServeRAID Manager, helping enable clients to manage multiple IBM TotalStorage DS300 and DS400 subsystems—as well as direct-attached internal ServeRAID controllers—all through a single, easy-to-use management console with an extensive online help library. Configuration wizards simplify initial storage setup. IBM ServeRAID Manager is designed to support most common operating environments for workgroup applications.

The management software of the DS300 is built directly into the client/server workgroup manager IBM Director. IBM Director is designed to allow IT administrators to view and track the hardware configuration of remote systems in detail and monitor the usage and performance of critical components, such as processors, disks and memory.

IBM TotalStorage DS300 at a glance

Model	1701-1RL	1701-1RS	1701-2RD
RAID controllers	Single	Single	Dual
Controller upgrade	No	Yes	Not applicable
RAID cache memory (per controller)	256MB	256MB	256MB
Battery backup for cache	No	Yes	Yes
Host interface	Gigabit Ethernet, iSCSI	Gigabit Ethernet, iSCSI	Gigabit Ethernet, iSCSI
Host ports per controller	1	2	2
System Memory (min/max per controller)	512MB	512MB/1GB	512MB/1GB
Drive interface	Ultra320 SCSI	Ultra320 SCSI	Ultra320 SCSI
Number of drive bays	7/14 max*	14	14
Maximum storage capacity	4.2TB*	4.2TB	4.2TB
RAID levels	0, 1, 10, 5, 50	0, 1, 10, 5, 50	0, 1, 10, 5, 50
Power supplies and fans	Single/optional dual redundant design	Dual redundant design	Dual redundant design
Rack support	Industry-standard 19-inch rack	Industry-standard 19-inch rack	Industry-standard 19-inch rack
Form factor	3U	3U	3U

* Requires a second power supply upgrade for maximum drives.

For more information

Contact your IBM representative or an IBM Business Partner, or visit:

- **ibm.com**/totalstorage
- **ibm.com**/eserver/xseries
- **ibm.com**/bladecenter

To view a complete list of pre-qualified TotalStorage solutions, visit:

- **ibm.com**/totalstorage/proven

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MB, GB and TB equal 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, where referring to storage capacity. Actual storage capacity will vary based upon many factors and may be less than stated. Some numbers given for storage capacities give capacity in native mode followed by capacity using data compression technology.

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